

AMENDMENTS TO THE DRAWINGS

Please amend the figures as shown in the enclosed replacement sheet. The attached sheet of drawings includes changes to Figure 1. Specifically, and as per the Examiner's objection, Figure 1 has been labeled Prior Art. Applicant submits that this replacement figure is formal.

REMARKS

Please reconsider this application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Amendments to the Claims

Claims 1-23 have been canceled by way of this reply, and Claims 24-31 have been added. Claims 24 and 31 are independent. The other claims depend, directly or indirectly, from claims 24. The amendments are made to improve readability of the claims and to focus the scope of the independent claims. Support for claims 24-31 is found, inter alia, in the original claims. No new matter has been added.

Amendment to the Title

Per the Office Action dated August 18, 2008, the title has been amended to read "Electric Machine Having a Magnetically Inducible Core." Applicant believes this title is clearly indicative of the invention in which the claims are directed.

Amendments to the Drawings

Per the Office Action dated August 18, 2008, Figure 1 has been designated by legend as prior art. The corrected drawing is in compliance with 37 CFR 1.121(d) as required. Applicant thanks the Examiner for noting this deficiency.

Claim Rejections under 35 U.S.C. § 102

Claims 1-7, 10-11, 13, 15-17, 20, 23 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,115,915 ("Godfrey"). Claims 1-23 have been canceled by

way of this reply. Thus, this rejection is now moot with respect to claims 1-23. To the extent that this rejection may apply to new claims 24-31, this rejection is respectfully traversed.

Independent claim 24 requires an electric machine comprising a magnetically inducible core with a plurality of printed circuit boards disposed at each end of the core, where each of the printed circuit boards is substantially parallel and has a substantially similar circuit design. Independent claim 24 also requires electrically insulated current conductors connecting the different pluralities of circuit boards, where the current conductors extend through a bore within the magnetically inducible core. Further, independent claim 31 recites a method of manufacturing the machine described above.

Godfrey shows, particularly in Figures 4a and 4b, printed circuit board end caps for a small two-pole, shunt wound dc motor. The radial spacing between the sets of the printed conducting pathways and the overall printed electrical path lengths are different. Independent claims 24 and 31 require a plurality of substantially similar printed circuit boards. As such, Godfrey fails to show all the elements of independent claims 24 and 31.

Thus, because Godfrey does not disclose a plurality of substantially similar printed circuit boards, as independent claims 24 and 31 require, a rejection under § 102(b) cannot be supported. As such, claims 24 and 31 are patentable over Godfrey. Dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claim Rejections under 35 U.S.C. § 103

Claims 8-9, 12, 14, 18-19, and 22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Godfrey in view of U.S. Patent 6,707,221 B2 ("Carl") and further in view of

U.S. Patent 6,836,047 B1 ("Leijon"). Claims 1-23 have been canceled by way of this reply. Thus, this rejection is now moot with respect to claims 1-23. To the extent that this rejection may apply to claims 24-31, this rejection is respectfully traversed.

As discussed above, Godfrey does not show the claimed invention as recited in independent claims 24 and 31. Further, Godfrey does not provide the motivation for one skilled in the art to modify Godfrey to suggest the claimed invention. In one embodiment of the present invention, three substantially similar circuit boards, shown in Figure 3, are used to connect a plurality of electrical conductors through a magnetically inducible motor core. Substantially similar printed circuit boards facilitate a more economical manufacturing process. As the number of electrical conductors increase the expense of manufacturing different printed circuit boards becomes greater. Thus, independent claim 24 requires each of the printed circuit boards "comprises a substantially similar circuit design." Similarly, independent claim 31 requires printed circuit boards "having substantially similar circuit design." Godfrey, however, merely shows the use of a printed circuit board as an end cap to the electric motor. As such, a skilled artisan would not be motivated to modify Godfrey to use substantially similar printed circuit boards.

Thus, Godfrey neither shows, *nor suggests*, the claimed invention as recited in independent claims 24 and 31. Carl, which the Examiner asserts as teaching the use of a soft magnetic material as the core, and Leijon, which the Examiner asserts uses an insulating lacquer to coat a component, do not provide that which Godfrey lacks. Specifically, Godfrey, Carl, and Leijon each fail to show, or suggest, the use of multiple, substantially similar printed circuit boards. In view of the above, Godfrey, Carl, and Leijon, whether considered separately or in combination, fail to show or suggest the claimed invention as recited in independent claims 24

and 31. Thus, claims 24 and 31 are patentable over any proposed combination of Godfrey, Carl, and Leijon. The remaining claims depend, either directly or indirectly, from claim 24, and therefore are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04465/025001).

Dated: February 18, 2009

Respectfully submitted,

By 

Jonathan P. Osha
Registration No.: 33,986
OSHA · LIANG LLP
909 Fannin Street, Suite 3500
Houston, Texas 77010
(713) 228-8600
(713) 228-8778 (Fax)
Attorney for Applicant

Attachment: Replacement Sheet -- Figure 1

475691_1